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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/977,426 | 10/16/2001 | Katsuhiro Saito | 215106US3 | 3162 |
| 22850 | 7590 | 06/29/2005 | EXAMINER | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | LEO, LEONARD R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3753 | |

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary

Application No.

09/977,426

Applicant(s)

SAITO ET AL.

Examiner

Leonard R. Leo

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-24 is/are pending in the application.
- 4a) Of the above claim(s) 20-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of the species of Figure 2 in the reply filed on June 10, 2005 is acknowledged. The traversal is on the ground(s) that independence and distinctness of the inventions has not been shown, the different species have not been shown to be mutually exclusive, and there would be no serious search and examination burden. This is not found persuasive because:

1) MPEP 803 states, “*Under the statute an application may properly be required to be restricted to one of two or more claimed inventions only if they are able to support separate patents and they are either independent (MPEP § 806.04 - § 806.04(i)) or distinct (MPEP § 806.05 - § 806.05(i)).* (emphasis added)” In this instance, the species are independent as defined in MPEP § 806.04, “(C) Where species under a genus are independent ...”

MPEP § 809.02(a) outlining the content of an election requirement does not require and explanation of independence.

MPEP § 816 in its entirety pertains to *distinct inventions* as demonstrated by the examples, not independent species.

2) MPEP § 806.04(e) states, “*Claims may be restricted to a single disclosed embodiment (i.e., a single species, and thus be designated a specific species claim), or a claim may include two or more of the disclosed embodiments within the breadth and scope of definition (and thus be designated a generic or genus claim). Species are always the specifically different embodiments.*” and

MPEP § 806.04(f) states, "The general test as to when claims are restricted, respectively, to different species is the fact that one claim recites limitations which under the disclosure are found in a first species but not in a second, while a second claim recites limitations disclosed only for the second species and not the first." In this instance, applicant has already demonstrated by the election that certain claims are readable on the respective species.

3) A search and examination on different species would be a serious burden on the Examiner, unless applicant states for the record the species are obvious variants of one another.

The requirement is still deemed proper and is therefore made FINAL.

Claims 20-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "***said one*** refrigerant path" in lines 14-15. There is insufficient antecedent basis for this limitation in the claim. The recitation has been read as "one of said refrigerant paths."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 10 and 15 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Nishishita (6,397,938)(Figures 1-2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-13 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishishita in view of Sugawara et al.

Nishishita discloses all the claimed limitations except a change in the cross-sectional flow area of a circulation space.

Sugawara et al discloses a heat exchanger comprising a plurality of distribution parts including two overlapped plates 13, 23 defining paths 15, circulation spaces defined by openings 22 connected at ends of the refrigerant paths decreasing in cross-sectional flow area in series for the purpose of providing uniform distribution of the fluid to improve heat exchange.

Since Nishishita and Sugawara et al are both from the same field of endeavor and/or analogous art, the purpose disclosed by Sugawara et al would have been recognized in the pertinent art of Nishishita.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Nishishita openings decreasing in cross-sectional flow area in series for the purpose of providing uniform distribution of the fluid to improve heat exchange as recognized by Sugawara et al.

Allowable Subject Matter

Claims 14 and 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

The comments from the Advisory action mailed March 11, 2005 are repeated below.

In response to applicants' argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the abstract of Sugawara et al clearly provides the motivation as similarly

Art Unit: 3753

stated in the previous Office action, "To make refrigerant to *flow uniformly* through the refrigerant passages of respective plates and *improve heat exchanging performance* by a method wherein plates, constituted so as to have inflow holes wherein each sectional area becomes successively smaller than the other plates, are provided between respective alternately laminated plates."

Nishishita may teach away from the teachings of the secondary reference to the extent of manufacturability and economics. However, the modification as taught by Sugawara et al is tenable with respect to improving heat exchange. Therefore, one of ordinary skill in the art concerned with improved heat transfer would employ in Nishishita openings decreasing in cross-sectional flow area in series for the purpose of providing uniform distribution of the fluid to improve heat exchange as recognized by Sugawara et al.

Conclusion

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard R. Leo whose telephone number is (571) 272-4916. The examiner can normally be reached on Monday thru Thursday.

Art Unit: 3753

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



LEONARD R. LEO
PRIMARY EXAMINER
ART UNIT 3753

June 25, 2005